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## REFLECTIONS ON THE HONG KONG CIRC REPORT

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### Abstract

The Government of the Hong Kong SAR sponsored a report investigating the Hong Kong construction industry and published the investigating committee's findings in 2001 (HK CIRC 2001). Since then the Provisional Construction Industry Coordination Board (PCICB), and its successor, the Construction Industry Council (CIC), also set up by the Government, has made progress with the necessary reforms. Now that seven years have passed, it is time for an independent evaluation of the impact of the CIRC initiative in order to assist the CIC and the Government decision-makers in refining the efforts to improve the industry's performance. This paper reports on the interim results of a study that seeks to provide such an evaluation.

**Keywords :** Construction industry development, Construction Industry Council, Hong Kong.

### 1. Introduction

The report about the Hong Kong construction industry (HK, CIRC 2001) is one of several studies (Raftery *et al* 2000; HKHA 2000) that have been published with a view to its development. Despite the wide range of expertise that the authors of these reports have drawn upon in formulating their respective conclusions and recommendations, there is a danger that some key factors may have been overlooked, or that key stakeholders groups have been ignored.

Apart from the studies cited above, very few research studies at the macro level have been published about the Hong Kong construction industry in the recent 20 years. Ganesan *et al* (1996) have examined labour supply issues and productivity, and Chiang *et al* (2000) have studied the market structure of building firms, but these are very focussed on specific topics within the industry. The body of knowledge about the construction industry as a whole in terms of theory relies solely on studies in the international domain. Even in this arena, the theoretical foundations are weak, as a leading expert in the field, Ofori, has argued (Ofori: 1993;1994). The first author has also formed a similar view and attempted to address the lack of theory with a recent international study (Fox 2003). This adopted a

grounded theory approach and used both data from interviews as well as questionnaire survey.

The findings from Fox's international study have enabled an understanding of the Hong Kong case through the use of a similar research methodology. Thus, research has also been conducted by the team, through a study of the factors likely to contribute to the development of the Hong Kong construction industry. Papers from their earlier collaboration submitted to international journals (Fox & Skitmore 2005, 2007), or are in the process of review (Fox *et al* 2008b).

Given this background, the purpose of this paper is to give some preliminary findings of the current study underway, the main aim of which is to evaluate the impact of the HK CIRC report. Although the whole research study uses data from both 20+ interviews and 150 questionnaires, this paper reports mainly on the interviews. Further publications will provide a more comprehensive picture in due course.

The paper is structured by first explaining the research methods used. Then, the HK CIRC report is evaluated in terms of the representativeness of the various stakeholder interest groups that exist. This sets the background for the responses from the interview respondents that forms the main part of the paper. Finally a discussion, summary and conclusions are made.

## **2. Research Methods**

The planned approach was to conduct dual-purpose interviews and invite responses to both open-ended questions, as well as a structured questionnaire. In total, fifteen stakeholder groups were identified, being based on a broad definition of the construction industry, and already used in an earlier Hong Kong study (Fox *et al* 2008a:4). These include: construction clients, consultants, contractors, designers, educators/trainers, government officials, professional bodies, quasi-government officials, researchers, material suppliers, plant suppliers construction lawyers, trades unions, politicians in the built environment, and information providers in the built environment. The initial method of obtaining interviews was to send out letters to potential respondents using a database of postgraduate students of the Faculty of Construction & Land Use at The Hong Kong Polytechnic University. The database comprised over 1000 students who had taken postgraduate programmes (mainly Masters level) over a 10 year period. Since most of these students would have several years experience prior to their application to the programmes, at the time of the survey they would have gained at least 5 years experience in the industry, and many of them would have 10 or even 15 years experience. Very few of this initial database of respondents were willing to give an interview, although more of them submitted completed questionnaires. This gave cause for serious reflection over the viability of collecting data using the initial approach.

Modifications were made to the invitation letter, the questionnaire and the means of returning it. We decided to use postage-paid envelopes, and these changes made a substantial improvement to the questionnaire responses from this first database. In addition, an alternative database was used, this one based on a business directory, and the target respondents were top-level managers. Many of these respondents were willing to

give interviews, as well as complete the questionnaire, and we proceeded on this basis. At the time of writing, 21 interviews have been completed, and over 150 questionnaires completed. Full details of the pilot study, the interview questions and the questionnaire will be provided as part of a research monograph being published by the authors later.

### 3. The Construction Industry Review Committee Report

The report was based on data collected from representatives of leading firms, senior government officials, as well as other traditional stakeholders. The main Committee chaired by Henry Tang, consisted of 16 Members including the Chairman, representing main contractors (1), developers (1), consultants (2), banks (3), consumers (1), government officials (4), education & training (2), and trades unions (1). Four sub-committees were set up, in the areas of Construction Quality & Safety (10 members + 12 Co-opted members); Manpower & Modernisation (11 members + 13 Co-opted members); Construction Cost and Environment (8 members + 11 Co-opted members); and a Working Group on Use of IT in Construction (7 members). These drew upon other co-opted stakeholders, as well as having members from the main Committee represented. Figure 1: caption shows the representation according to stakeholders.

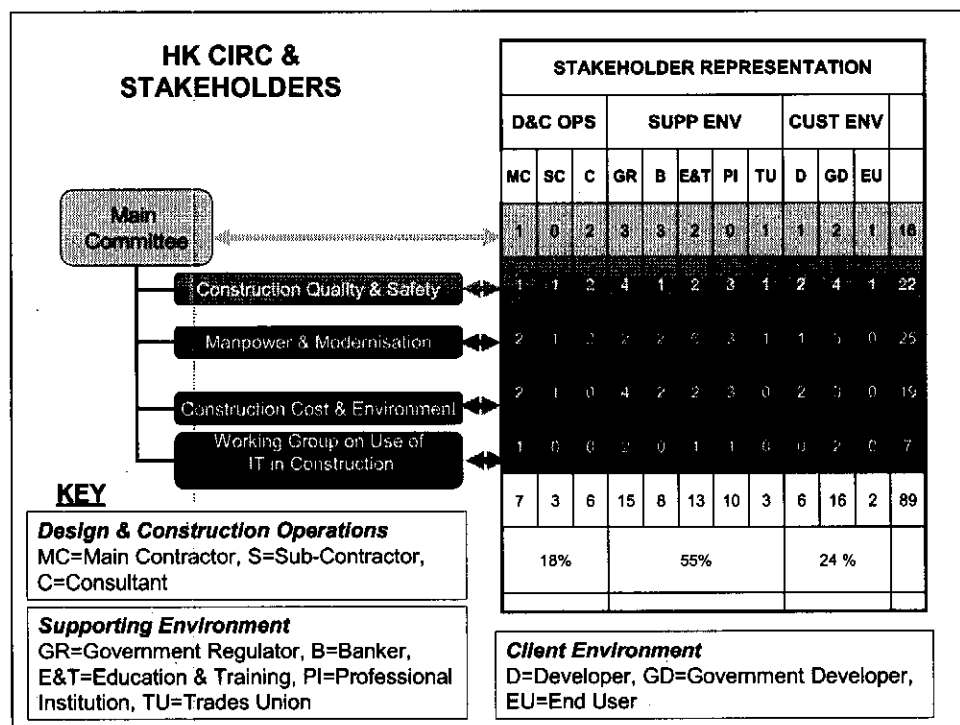


Figure 1: Committee and Sub-Committees of HK CIRC showing Stakeholder Members and Co-opted Members

#### 3.1 Scope of the Construction Industry and Significance of the Report as Published

The report does not define the industry, but we can gain some inference of the scope of the stakeholders considered relevant by reference to the membership of the Committee and sub-committees, as well as the *Proposed Co-ordination Framework* as described in Annex G. It is clear that the committee see that the construction industry is much more than the

production work of contractors and sub-contractors on sites. It also includes the design stages, carried out by architectural and engineering consultants, as well as contributions by other stakeholders. The significance of the report is three fold.

### **3.1.1 The Significance of Private and Public Sector Partnership**

First, and most importantly, it shows that the industry involves both the private and public sector. The report projects a vision of an equal partnership between "Industry" and "Government"

On the side of *Government*, the Works Bureau is shown as a lead agency, taking the dual role of, on the one hand, a regulator and promoter of the construction industry, through town planning, lands, environmental and building control. On the other hand, it is a client through projects initiated in the Architectural Services Department, Civil Engineering Dept., Drainage Services Dept., Electrical & Mechanical Services Dept., etc.

On the side of *Industry*, there are private sector clients, together with their professional consultants, contractors, subcontractors, technicians, workers and other stakeholders.

### **3.1.2 The Significance of a Lead Agency**

Secondly, there is no equivalent lead agency to represent the private sector. It is this gap that the report highlights, and through its whole 10 chapters, shows the urgent need for an *Industry Co-ordinating Body*. By tradition, and arising from its colonial roots, the government has normally taken the lead in promotion of the industry activity, whether it is in the public or private sector. In the private sector, government regulates the land supply, since almost all land is government owned. Private firms lease the use of the land, but ultimate ownership is vested in the government. The government can therefore easily regulate the cost of land and the timing of its release to private sector developers. Likewise, it has full control over the initiation and progress of public sector projects, including the huge public housing programme (representing around 50% of the total new housing provision).

### **3.1.3 The Significance of Leadership in the Private Sector**

Thirdly, the proposed *Industry Co-ordinating Body* is clearly shown in the private sector, and this is perhaps the most ambitious part of the whole vision. It requires that leadership for the whole industry will come from and be supported by the private sector. This is a major step for the whole industry, and in a sense, one that the government has presented as a challenge for the private sector to respond to. The writers of the report make it clear that this is their understanding of the situation in unmistakeable terms: "*To obtain the promised benefits, the construction industry must take ownership of the change programme and demonstrate commitment to its successful implementation.*" (page18, para. 1.9). The taking of ownership is the key phrase, here.

Thus, through the publication of the Report, the stage was set for a major drama, with high expectations that a champion would arise to take the leading role over the difficult process of culture change. Even if a suitable champion was ready and able to step forward, immediately the question would arise as to whom else would join in support of leaders to face the challenge. All stakeholders would need to think about their role and ponder over the gains and losses that change may bring. The key point here is that all stakeholders have something to gain or lose, and it is thus vital that each of them be invited to join in the discussion and given an opportunity to influence the direction the future may take. Omission of key players might put the whole vision in jeopardy. Thus, the representation on the Committee is a key concern. This is examined next.

### 3.2 Representation of the Key Stakeholders

In terms of composition, a few observations need to be made. First, when the Committee was set up it is not known how the committee members were selected. The Hong Kong Government has a well established process of setting up advisory committees and these provide a useful way for the government to listen to the voice of the people. The use of these committees is not always consistent with achieving genuine, impartial and true advice, and members of the public frequently criticise the way that they operate, their criticisms extending to the transparency of the committees workings, as well as the people appointed who represent them.

Second, given the background as outlined above, and with reference to Figure 1 and the framework of the whole set of stakeholders involved in the construction industry, it can be argued that there was both omission and an imbalance in their representation. For example, the material and plant suppliers, construction lawyers, politicians, and publishers were completely overlooked, whilst government officials took 26% of the membership of the main committee. In the sub-committee levels, the government members comprised between 30 to 35% of the membership, and in the IT Group 57%.

Third, of the 10 stakeholders that were represented, they could be broadly arranged into three groups, namely the *design & construction operations* including main contractors, sub-contractors and consultants; the *supporting environment*, comprising government, bankers, education & training, professional institutions and trades unions; and then the *customer environment*, including end-users, and developers. When classified in this way, the *supporting environment* is clearly dominant (55%), followed by *customer environment* (27%) and lastly *design & construction operations* (18%) as a minority group. Since some of the government representatives have been classed as clients rather than of a regulatory control nature, then some re-distribution between the supporting environment and customer environment may be more representative of their true influence, but this is debatable. However, this does not change the fact that the group influence of design & construction operations remains at 18%, a very low percentage, especially since this group would be the key group in any significant change.

Fourth, if it is expected that a champion is to come from the industry, it follows that the design & construction operations group would provide such a person. When its representation is so low, it does not provide a wide base to draw upon for potential candidates.

To summarise, the scope, significance and representativeness of the report each have their part to play in the extent and success of its implementation. As the preceding paragraphs in this section have outlined, the scope of the report is wider than merely the site production process. It embraces the development, design and production phases, the use of buildings/structures and ongoing performance, as well as recycling of materials to reduce environmental waste. The expressed vision is certainly one which challenges the industry, and it is this which is highly significant. However, it remains to be seen as to whether the industry itself recognises and can rise to the challenge. Even if there is recognition, the lack of representation in the committee from the right people may restrict the choice of leaders who can implement the vision. The next section of the paper provides a brief overview of the responses to the report and the potential for full implementation of the vision.

#### **4. Responses to the CIRC Report through Interviews**

Of the 16 interviewees that are so far analysed, 9 represented the *design & construction operations* including main contractors, sub-contractors and consultants; 4 represented the *supporting environment*, comprising government, bankers, education & training, professional institutions and trades unions; and 3 represented the *customer environment*, including end-users, and developers.

##### **4.1 The Strengths, Weaknesses, Opportunities, & Threats (SWOT) Analysis**

After enquiring about their background in the industry, the respondents were invited to give their views on the Strengths, Weaknesses, Opportunities and Threats (SWOT) of the Hong Kong Construction Industry (HKCI). The responses as shown in Tables 1 and 2 provided 29 Strengths, 45 Weaknesses, 11 Opportunities and 15 Threats. Clearly the negative things outweighed the positive things by a factor of 1.5 to 1. Based on the most frequently mentioned factors, the SWOT analysis yielded:

**Strengths :** *Very professional / sophisticated in high-rise buildings (7); Fast completion of projects (6); Hard-working workforce (4); Flexibility (4); Very advanced management (4).*

**Weaknesses :** *Method of tendering – lump sum (7) Fragmentation (4); Not competitive (4); Weak government since 1997 (4); Lack of leadership (4); Insufficient R & D (4); Lack of innovativeness, adventurousness (4); Insufficient people (4).*

**Opportunities :** *Work in Macau and PRC mainland (9); 10 New infrastructure projects announced by government (6); Urban redevelopment (4).*

**Threats :** *Highly dependent of economic environment (9); High competition from overseas and PRC mainland (5); SMEs suffer in downturn (4); Young people not joining industry (4).*

**Table 1: Strengths & Weaknesses of the HKCI**

Frequency of Factor ▼	Interview Respondent ►	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
		Main Contracting	Contractor	Building Services	MTRC	Architect	Main Contractor	Architect	Architect	HKHA	Academic	REDA	Consultant	Trades Union 1	Trades Union 2	Foundation Contractor	Supplier
	▼ Factor identified by Respondent																
	<b>Q2 STRENGTHS OF HKCI (29)</b>																
7	Very professional/sophisticated in high-rise buildings	*								*	*	*	*	*	*		
6	Fast completion of projects	*				*		*			*			*			*
4	Hard-working workforce / Human Resources	*	*							*				*			
4	Flexibility		*					*			*						*
4	Professional workforce						*			*		*	*				
4	Very advanced management							*			*	*					*
3	Technology		*								*	*					
3	Society demands safety, environment, quality						*	*	*								
3	Professional institutions & professional talent								*	*			*				
	Interview Respondent ►	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	<b>Q3 WEAKNESSES OF HKCI (45)</b>																
7	Method of tendering – lump sum	*				*	*		*		*		*			*	
4	Lack of coordination / Fragmented	*			*	*			*							*	*
4	Not competitive in PRC or with foreign co's		*				*					*			*		
4	Weak government since 1997			*			*		*			*					
4	Lack of leadership				*		*		*			*					
4	Insufficient R&D					*			*			*	*				
4	Lack of innovativeness, adventurousness						*		*			*	*				
4	Not enough people									*			*	*	*		
3	Lack of aspiration to continuous improvement				*						*	*					
3	Highly overheated industry at peak in 1997				*		*						*				
3	Poor Safety record				*						*					*	
3	Small market					*	*					*					
3	Professionals not willing to leave HK						*		*			*					
3	Poor quality of work							*			*						*
3	Poor attention to environment & sustainability												*		*		*



**Table 2: Opportunities & Threats to the HKCI**

	Interview Respondent ►	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	<b>Q3 OPPORTUNITIES OF HKCI (11)</b>																
9	Work in Macau and PRC	*	*	*		*	*		*			*		*			*
6	10 new infrastructure projects				*	*	*						*		*	*	
4	Urban redevelopment			*										*	*	*	
3	Renovation, Alteration & Addition works	*	*					*									
	<b>Interview Respondent ►</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>	<b>N</b>	<b>O</b>	<b>P</b>
	<b>Q3 THREATS TO HKCI (15)</b>																
9	Highly dependent on economic environment	*	*	*		*	*			*	*					*	*
5	Competition from overseas, and PRC	*	*				*			*			*				
4	SMEs suffer in downturn		*										*			*	*
4	Young people not joining industry				*				*			*			*		
3	Few projects (Highly dependent on Econ)			*					*		*						
3	Rising wages, material costs			*		*				*							

## 4.2 The Key Barriers to Improvement

Again, based on the most frequently mentioned factors, the barriers were: *Change attitudes to positive culture* (8); *Change methods of tendering/bidding procedures* (5); *Remove practice of lowest bidders* (5); *Raise standards* (5); *Improve quality of workers* (4); *Subcontract less / better control Subcontractors* (4)

## 4.3 Awareness of the HK CIRC Report

Of the 16 respondents, 4 had participated in meetings for the CIRC Committee, and a further 8 had read it. All the 5 remaining respondents had heard of it. This high level of awareness contrasts with the questionnaire data which showed that of 150 respondents, 51% had not heard of the report or were unfamiliar with it, and 47% were either somewhat familiar, familiar, or very familiar with it.

## 4.4 The Key Barriers to Adoption by the HKCI of the CIRC Recommendations

The respondents responded to question about barriers, and 3 of them stated that there are no barriers. However, others identified 16 barriers to the adoption of the CIRC recommendations. Of these, the most frequently mentioned were: *Training needed for contractors* (3); *SMEs are not improving* (3).

## 4.5 Expectations of Future Developments and Changes Arising from Implementation

Respondents were invited to give their views about what changes they expected in their own organisations as the CIRC recommendations took effect. This resulted in 25 items, quite a large number. The most frequently mentioned item was *More education and training* (5), followed by *The HKCI needs to look outwards internationally* (3). Closer inspection showed that the international dimension was mentioned very frequently in different ways. For example *Recruitment from the international market* (2); *Campus recruitment internationally* (2); *Adoption of international standards* (1); and *Technical*

*training overseas* (1). If these are all added together, the need to participate in international experience is the most dominant theme.

#### 4.6 Summary of Responses and Conclusions

Collectively the respondents have identified some important themes in relation to the CIRC findings. However, the first thing that struck us was not the factual details of the responses to our questions. Throughout all the interviews, we could sense palpably the passion and concern that each respondent projected as they related their experiences in their daily work. There was no doubt that these leaders of industry had something they wanted to share with us. We were welcomed as it gave them an opportunity to relieve themselves of the burdens they faced. There was and is an earnestness about the need for significant change in the way the industry operates. Despite their busy schedules, they were willing to give us at least an hour of their time to respond to our quest. There was a determination to improve, and evidence of a "can-do" culture which at least a couple of the respondents noted are typical strengths of the Hong Kong construction industry.

Second, there was no doubt in our minds that there is collectively a deep understanding of the nature of the industry, its strong and weak points, as well as opportunities and threats. However, this is a collective view of ours, and none of the individuals could identify all the strengths, all the weaknesses, opportunities, threats and so on. This demonstrates the urgent need for the industry to find its voice, and unite in its search for better understanding of its own nature, its various stakeholders, their viewpoints, whether similar or different. The new Construction Industry Council (CIC) proposed in the report needs to empower the stakeholders to express their views and give due recognition to each when making policies.

Third, the Hong Kong government has been very brave in putting forward this vision for a new construction industry. Change is always difficult for organisations and much research has been already done to understand the nature and methods of promoting change. Yet, the industry is not an organisation in the sense as found in mainstream management theory. By its nature, it is a collection of thousands of large and small firms, groups and individuals, amounting to around 250,000 people, with no obvious leader. In some ways, Hong Kong is still an infant in its social, and political development. The government wants to stay small (or at least not get larger), and has been trying to downsize through privatisation of many of its functions. For several decades, the policy has remained the same in terms of "*positive non-intervention*" in relation to the private sector – the government believes in the free market economy. Therefore, the proposals in the CIRC report are entirely consistent with a market-led construction industry. The key questions are: "*Does the industry understand the vision as laid down?*" and "*Can the industry respond appropriately to this vision?*" At this stage of the analysis, we don't know. However, we will be looking for answers as the analysis proceeds and we will report on this in later publications.

Fourth, our analysis of the representativeness of the Review Committee shows that its membership is found wanting in a number of respects. The report places an emphasis on improvements to the whole supply chain, and several of our respondents mentioned specific examples of improvements that need to be made. We find that in the selection of Committee members, some key players, namely materials suppliers and plant suppliers were omitted. This deficiency should be addressed without delay in the CIC. Other

stakeholders should also be consulted, if not included as members, namely construction and property lawyers, construction/real estate politicians, and construction/real estate publishers/information providers.

Finally, we wish to emphasise that our analysis is not yet complete, and this is an interim set of findings from our ongoing research study. However, we do detect some clear themes in relation to the CIRC report, some of which have been explained in the sections above. As researchers, we include ourselves in the definition of the industry, and so we also are stakeholders with something to gain or to lose through the changes likely to take place. The CIC might like to consider how researchers such as ourselves can make a contribution to the development of the industry. This project has been funded by the government Research Grants Council, and was the result of a successful competitive bid. The sponsors of the conference, The Construction Industry Institute Hong Kong, represent a private-sector led means to carry out research into the industry. We hope that through this conference, we can make our own contribution.

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